

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-20 are canceled.

21. (Currently amended) A method for improving skin appearance, the method comprising:
locating a target area of skin to be cosmetically enhanced;
introducing an amount of ultrasound energy at sufficiently high pressure amplitudes to propagate [and propagating] the ultrasound energy non-linearly into a dermis layer of the target area;
allowing the ultrasound energy to be absorbed by the dermis layer such that the dermis layer is stimulated or irritated sufficiently to induce new connective tissue formation; and
changing a smoothness of an epidermis layer of the skin.

22. (Previously presented) The method of claim 21, wherein the step of introducing includes applying a focused beam of ultrasound energy into the dermis layer.

23. (Previously presented) The method of claim 22, wherein the focused beam of ultrasound energy comprises acoustic pulses.

24. (Previously presented) The method of claim 21, wherein the amount of ultrasound energy is effective to mechanically disrupt the dermis layer of the target area of skin.

25. (Previously presented) The method of claim 24, wherein the dermis layer is mechanically disrupted with shock waves.

26. (Previously presented) The method of claim 24, wherein the dermis layer is mechanically disrupted by cavitation.

27. (Previously presented) The method of claim 21, wherein the step of stimulating or irritating the dermis layer includes the step of elevating the temperature of the dermis layer.

28. (Previously presented) The method of claim 21, wherein the step of stimulating or irritating the dermis layer includes the step of denaturing the proteins in the dermis layer.

29. (Previously presented) The method of claim 21, wherein the target area of skin includes a wrinkle.

30. (Previously presented) The method of claim 22, further comprising the step of scanning the focused beam of ultrasound energy over the target area.

31. (Previously presented) The method of claim 21, wherein the step of introducing includes delivering a spatially uniform dosage of ultrasound energy into the dermis layer.

32. (Previously presented) The method of claim 21, further comprising the step of cooling the target area of skin.

33. (Currently amended) An apparatus for improving skin appearance comprising: an ultrasound transducer for transmitting acoustic waves into a dermis layer of skin; and a control device constructed and arranged to control the transducer and induce [non-linear propagation of] ultrasound energy at sufficiently high pressure amplitudes so as to cause non-linear propagation of the energy into the dermis layer sufficient to induce new connective tissue formation.

34. (Previously presented) The apparatus of claim 33, wherein the control device is constructed to deliver a spatially uniform dosage of ultrasound energy to the dermis layer.

35. (Previously presented) The apparatus of claim 33, further including an acoustical waveguide.

36. (Previously presented) The apparatus of claim 33, wherein the ultrasound transducer is a phased array ultrasound transducer.